

BURNER REPORT for IGS Units 1 & 2

Content Outline:

Burner History

- Boiler Acceptance Testing
- Concerns- Cooling Air Flow Requirements vs Backplate Temps
- Documentation- IPSC Inspection reports
- Consulting Reports

Discussion of Concerns

- Mechanical Degradation
- Potential Safety Problems

Upgrade Recommendation

- Unit 1 Flame Stabilizers (w/ old burners)
- Unit 2 New Burners (improved design) and Flame Stabilizers
- Drawings

Followup Inspections

- Unit 2 Fall 1992
- Unit 1 Spring 1993

Combustion (performance) Components discussion

- Oxygen profiles
- CO
- Unburned Carbon in Ash (LOI)
- NOx
- Fuel/ Air Flow Balance
- Cooling Air Flow Requirements
- Secondary air windbox damper positions
- Burner Front Temperatures
- Eyebrows
- Coal Ash Fusion Temperatures
- Pulv Configuration
- Scanner performance and positioning
- Burner Turndowns
- Economizer Gas Outlet Temperatures
- Heat Distribution thru boiler
- Drum Level Indications
- Tube wastage

Fuel/ Air Flow Balancing

- Fuel flow balancing (restrictor changeouts)
- Air flow balancing